

ICS 13.220.20
CCS C81



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 4717-2024

Replacing GB 4717-2005

Fire alarm control units

火灾报警控制器

Issued on: April 29, 2024

Implemented on: May 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting: This document replaces GB 4717-2005 "Fire Alarm Controller": Compared with GB 4717-2005, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows:

- a) Added fire alarm signal, fire alarm status, fault alarm signal, fault alarm status, supervision alarm signal, operation data Storage unit, fire electrical control device, fire linkage communication module, fire system alarm bus, fire system linkage bus, fire Definition of the defense system equipment control bus (see 3:2, 3:3, 3:4, 3:5, 3:6, 3:10, 3:11, 3:12, 3:13, 3:14, 3:15);
- b) Deleted the definition of regulatory signal (see 4:2 of the:2005 edition);
- c) Added the setting requirements for buttons and indicator lights (see 5:3:1:5);
- d) Added the communication line requirements for the controller (see 5:3:1:6);
- e) Added enclosure protection requirements (see 5:3:1:8);
- f) Added shell combustion performance requirements (see 5:3:1:9);
- g) The requirements for indicator lights have been changed (see 5:3:2, 5:4:2 of the:2005 edition);
- h) Added the wiring requirements for audio devices (see 5:3:4:1);
- i) Added requirements for backup power supply and batteries (see 5:3:7);
- j) Added requirements for operation data storage unit (see 5:3:9);

k) Changed the display requirements for delay time (see 5:4:1:2, 5:2:2:2 of the:2005 edition);

l) Added the requirements for information confirmation button (key) (see 5:4:2:3);

m) Added requirements for linkage start control button (key) (see 5:4:2:4);

1 Scope

GB 4717-2024 is the Chinese national standard on fire alarm control units, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 29 April 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2025. Classification: ICS 13.220.20, CCS C81. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document defines the terms and definitions of fire alarm controllers, specifies the classification and nomenclature, requirements, inspection rules and markings, and describes the relevant Appropriate test method: This document applies to the design, manufacture and use of fire alarm controllers (hereinafter referred to as controllers) used in industrial and civil buildings: test:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 4208-2017 Enclosure protection degree (IP code)

GB/T 9969 General principles for instructions for use of industrial products

GB 12978 Inspection Rules for Fire Protection Electronic Products

GB 16806 Fire linkage control system

GB/T 16838 Environmental test methods and severity levels for fire protection electronic products GB/T 17626:

2 Electromagnetic compatibility test and measurement technology Electrostatic discharge immunity test GB/T 17626:

3 Electromagnetic compatibility test and measurement technology Radio frequency electromagnetic field radiation immunity test GB/T 17626:

4 Electromagnetic compatibility test and measurement technology Electrical fast transient pulse group immunity test GB/T 17626:

5 Electromagnetic compatibility test and measurement technology Surge (impact) immunity test GB/T 17626:

6 Electromagnetic compatibility test and measurement technology - Immunity to conducted disturbances induced by radio frequency fields GB/T 17626:

11 Electromagnetic compatibility test and measurement technology Part 11: For each phase input current less than or equal to 16A Voltage dips, short interruptions and voltage variations immunity test for equipment

3 Terms and definitions

The following terms and definitions apply to this document: 3:

1 Disabled condition The state the controller is in after the muting function is activated: 3:2
fire alarm signal fire alarm signal The signal sent by the fire alarm trigger device when the monitoring parameters of the fire alarm trigger device meet the fire alarm conditions: 3:

3 Fire alarm status fire alarm condition The state of the controller when it issues a fire alarm prompt message after receiving a fire alarm signal: 3:

4 Fault alarm signal fault alarm signal A signal sent when the automatic fire alarm system equipment malfunctions and cannot operate normally: